

QUARTERLY HIV/AIDS REPORT, MICHIGAN

JULY 2008

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General HIV

AIDS (Acquired Immune Deficiency Syndrome)

Diagnosis with any one of 26 different opportunistic illnesses which are indicative of a severe immune deficiency, or a laboratory test demonstrating severe immune deficiency (i.e. CD4 count <200 or CD4 percent <14%)

Case Definitions for HIV and AIDS

Standard definitions used by all states. Specific information is required in order to count a case of HIV infection or AIDS, including a method to uniquely identify an individual. Each person is counted as either HIV infected without AIDS or HIV infected with AIDS. Once a person meets the AIDS case definition, this person is always counted as an AIDS case, even if his/her health improves.

HAART

Highly Active Antiretroviral Therapy

HIV (Human Immunodeficiency Virus)

Diagnosis with HIV by positive HIV screening and confirmatory test or positive result or detectable quantity on virologic test

Pediatric Cases

Children < 13 years at the time of diagnosis

Epidemiology Terms

Epidemiology

The study of the distribution, determinates, and frequency of disease in humans.

GIS (Geographic Information System)

The display and analysis of geographic data in map format.

Incidence

Number of persons who become infected with a disease in a certain period of time, usually a year.

New Diagnoses

Number of cases newly diagnosed over a given period of time, usually a year. In HIV surveillance, new diagnoses do not necessarily represent new infections, as newly diagnosed cases may have been infected for many years. Thus, only some newly diagnosed cases are also incident cases.

Prevalence

Total number of persons currently living with a disease at one point in time. See page ii for a description of estimated prevalence in Michigan.

Public Health Surveillance

The ongoing collection, analysis, interpretation, dissemination, and evaluation of population-based information about persons with a condition or risk factor of public health concern.

Rate

Count of infected cases divided by the number of persons in the population (infected and uninfected). This calculation is multiplied by a multiple of 10, usually 1,000 or 100,000. Allows one to weigh the relationship between prevalence or number of new diagnoses and population.

Administrative Info

CDC

U.S. Centers for Disease Control and Prevention

eHARS (HIV/AIDS Reporting System)

A standardized database developed by CDC for national reporting of HIV/AIDS

HAPIS

HIV/AIDS Prevention and Intervention Section

MDCH

Michigan Department of Community Health

Risk Categories

Blood Recipient

All hemophiliacs, blood transfusion recipients, and organ recipients who received blood products prior to 1985 and all persons documented to have ever received an infected organ or unit of blood

Heterosexual

HRH (High Risk Heterosexuals)

Males and females whose sexual partners are known to be HIV-infected or at high risk for HIV. The partners meet one of the following criteria: a history of sexual contact with bi-sexual males (for females), IDU, hemophiliacs, HIV+ transfusion recipients, or other HIV+ persons of unknown risk

PH (Presumed Heterosexual)-Female

Females whose only reported risk is heterosexual contact, and their male partners' risk and HIV status is unknown

IDU (Injection Drug User)

Persons who have a history of injecting drugs

Perinatal

HIV transmission from mother to child during birth or through breastfeeding.

MSM (Men who have sex with men)

Males who have a history of sexual contact with other men or with both men and women

MSM/IDU

MSM who also have a history of injecting drugs

Undetermined

PH (Presumed Heterosexual)-Male

Males whose only reported risk is heterosexual contact, and their female partners' risk and HIV status is unknown

Unknown

Males and females with no identified risk

HIV Surveillance in Michigan

Background

Reports of HIV infection and AIDS are submitted to state and local health departments under Michigan law by providers making the diagnoses. In addition, MDCH implemented PA 514 in April 2005, requiring laboratories to report HIV test results. The addition of laboratory reporting to the HIV surveillance system has increased the case reports received and has improved reporting completeness. Anonymous HIV reports (without name or other identifier) are excluded from this report because we cannot estimate duplication, update status, or obtain missing data. A total of 1,927 complete anonymous reports have been reported in Michigan.

HIV Prevalence Estimates for Michigan

HIV prevalence estimates in this report are based on adding the following three components and rounding: 1) the number of cases living with HIV/AIDS, 2) the number of known HIV+ cases not yet reported, estimated at 10 percent of the reported living HIV/AIDS cases, and 3) the number of HIV+ cases that have not yet been tested, estimated at 25 percent of the total cases living with HIV/AIDS (identical to the CDC estimate).

Categorical estimates of HIV infection are calculated from the distribution of reported cases among each group of confidentially-reported persons living with HIV or AIDS. The proportion of total cases is multiplied by 18,000. For example, 77 percent of combined HIV and AIDS reports are among men. Therefore, the number of HIV-infected men in Michigan is estimated to be $13,860 = (76.99\% \times 18,000)$. Since the estimates are rounded to the nearest 10, totals may not equal 18,000. The minimum estimate is 10.

Prison estimates of HIV infection are calculated differently than the above mentioned categorical estimates. Because all prisoners are tested for HIV upon entry to prison, there is no need to apply estimates to account for unreported and untested cases to the reported prison cases. Therefore, the prison prevalence estimate is calculated by rounding the reported number of persons living with HIV/AIDS who were diagnosed in prison to the nearest 10.

County estimates of HIV infection are calculated similarly to the categorical estimates; however, for county calculations the proportion of cases in a particular county is multiplied by the statewide estimate minus the prison estimate ($18,000 - 770 = 17,230$). For example, 10.82% of HIV/AIDS cases were living in Oakland county at diagnosis. Therefore, the number of HIV-infected persons who were living in Oakland county at the time of diagnosis is estimated to be 2,060 ($10.82\% \times 17,230$). Since the estimates are rounded to the nearest 10, the county totals may not equal 17,230. The method of calculating prevalence estimates for county of residence was revised as of the April 2008, and thus county estimates presented prior to this data may differ from current and future estimates.

Michigan HIV Surveillance Activities

Core HIV Surveillance

Population-based surveillance system of diagnosed adult, adolescent, and pediatric HIV/AIDS cases.

MMP (Medical Monitoring Project)

Project providing information on needs, risk behaviors, barriers to utilization of services, and quality of care, as well as other data, among HIV-positive persons in care in Michigan.

Michigan MMP Coordinator, VACCANT. Call (313) 876-4769

NHBS (National HIV Behavioral Surveillance)

Surveillance system to monitor selected behaviors and access to prevention services among groups of uninfected persons at highest risk for HIV infection: MSM, IDU, and Heterosexuals Living in High Risk Areas.

Michigan NHBS Coordinator, Emily Higgins (313) 876-0176

STARHS (Serologic Testing Algorithm for Recent HIV Seroconversion)

HIV Incidence Surveillance that will enable estimation of new HIV infections in Michigan.

Michigan STARHS Coordinator, Marianne O'Connor (313) 876-0854

VARHS (Variant, Atypical, and Resistant HIV Surveillance)

Surveillance of drug-resistant and sub-type HIV strains using viral genotyping of remnant sera.

Michigan VARHS Coordinator, Mary-Grace Brandt (313) 876-4115

HIV Surveillance Staff Contacts

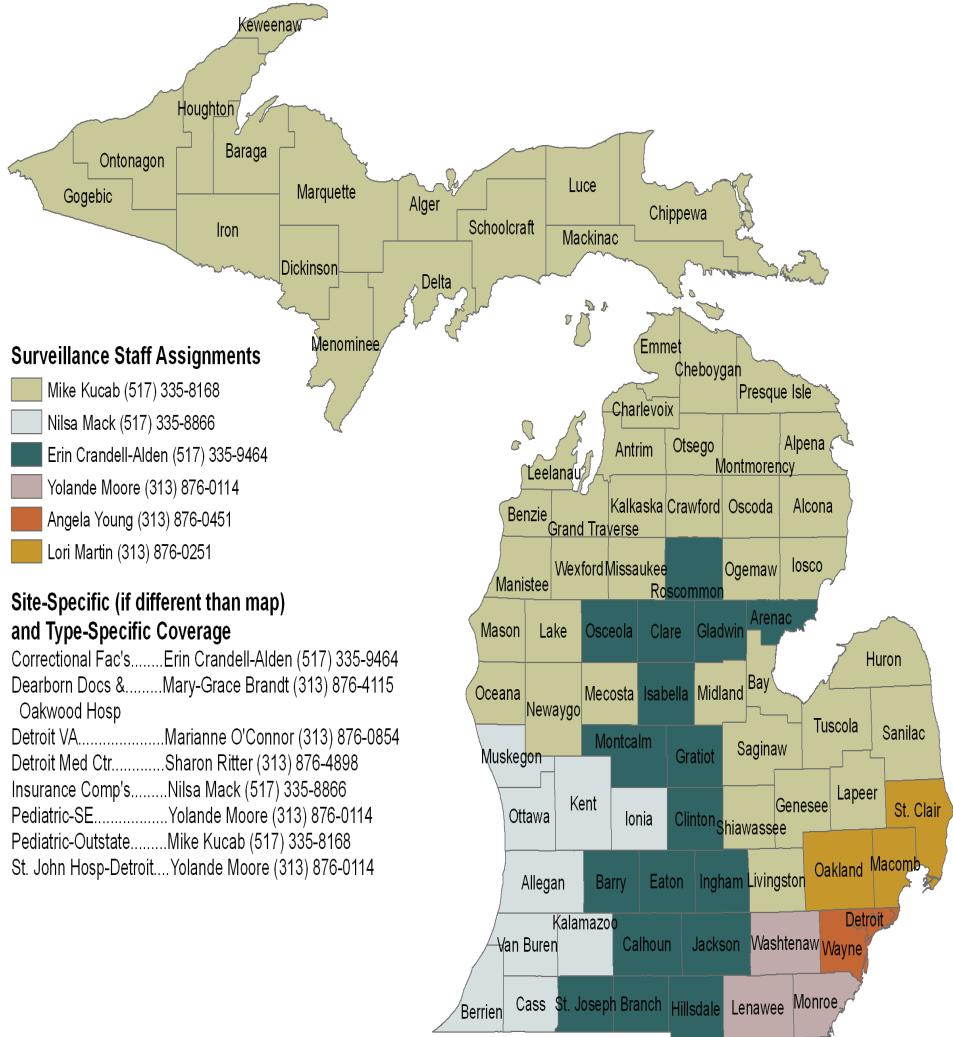


TABLE 1. Demographic Information on Prevalent HIV/AIDS Cases

	EST PREV*	REPORTED PREVALENCE						CENSUS 2006 ESTIMATES	
		HIV, not AIDS		AIDS		Total		Rate per 100,000 [†]	Number Percent
		Number	Number Percent	Number	Percent	Number	Percent		
RACE/ ETHNICITY[§]									
White	6,370	2,213	(35%)	2,601	(36%)	4,814	(35%)	61	7,846,335 (78%)
Black	10,570	3,770	(59%)	4,225	(58%)	7,995	(59%)	561	1,424,394 (14%)
Hispanic	720	241	(4%)	305	(4%)	546	(4%)	139	393,281 (4%)
Asian/PI	80	32	(1%)	32	(0%)	64	(0%)	27	237,073 (2%)
Am Indian/AN	60	24	(0%)	19	(0%)	43	(0%)	79	54,231 (1%)
Multi/Unk/Other	200	72	(1%)	77	(1%)	149	(1%)	N/A	140,329 (1%)
SEX & RACE									
Males	13,860	4,745	(75%)	5,733	(79%)	10,478	(77%)	211	4,969,692 (49%)
White Males	5,540	1,869	(29%)	2,319	(32%)	4,188	(31%)	108	3,873,261 (38%)
Black Males	7,510	2,602	(41%)	3,077	(42%)	5,679	(42%)	843	673,766 (7%)
Hispanic Males	560	181	(3%)	241	(3%)	422	(3%)	202	208,505 (2%)
Other Males	250	93	(1%)	96	(1%)	189	(1%)	88	214,160 (2%)
Females	4,140	1,607	(25%)	1,526	(21%)	3,133	(23%)	61	5,125,951 (51%)
White Females	830	344	(5%)	282	(4%)	626	(5%)	16	3,973,074 (39%)
Black Females	3,060	1,168	(18%)	1,148	(16%)	2,316	(17%)	309	750,628 (7%)
Hispanic Fmfs	160	60	(1%)	64	(1%)	124	(1%)	67	184,776 (2%)
Other Females	90	35	(1%)	32	(0%)	67	(0%)	31	217,473 (2%)
RISK*									
Male-Male Sex	8,510	2,866	(45%)	3,566	(49%)	6,432	(47%)	N/A	N/A N/A
Injection Drug Use	2,190	682	(11%)	971	(13%)	1,653	(12%)	N/A	N/A N/A
MSM/IDU	820	260	(4%)	358	(5%)	618	(5%)	N/A	N/A N/A
Blood Products	130	34	(1%)	63	(1%)	97	(1%)	N/A	N/A N/A
Heterosexual	3,200	1,199	(19%)	1,224	(17%)	2,423	(18%)	N/A	N/A N/A
HRH	2,330	829	(13%)	933	(13%)	1,762	(13%)	N/A	N/A N/A
PH-Female	870	370	(6%)	291	(4%)	661	(5%)	N/A	N/A N/A
Perinatal	200	105	(2%)	47	(1%)	152	(1%)	N/A	N/A N/A
Undetermined	2,960	1,206	(19%)	1,030	(14%)	2,236	(16%)	N/A	N/A N/A
PH-Male	1,590	557	(9%)	643	(9%)	1,200	(9%)	N/A	N/A N/A
Unknown	1,370	649	(10%)	387	(5%)	1,036	(8%)	N/A	N/A N/A
AGE AT HIV DIAGNOSIS									
0 - 12 years	230	116	(2%)	57	(1%)	173	(1%)	N/A	N/A N/A
13 - 19 years	700	325	(5%)	208	(3%)	533	(4%)	N/A	N/A N/A
20 - 24 years	2,180	942	(15%)	708	(10%)	1,650	(12%)	N/A	N/A N/A
25 - 29 years	2,980	1,098	(17%)	1,152	(16%)	2,250	(17%)	N/A	N/A N/A
30 - 39 years	6,510	2,159	(34%)	2,767	(38%)	4,926	(36%)	N/A	N/A N/A
40 - 49 years	3,850	1,239	(20%)	1,672	(23%)	2,911	(21%)	N/A	N/A N/A
50 - 59 years	1,270	385	(6%)	572	(8%)	957	(7%)	N/A	N/A N/A
60 years and over	280	85	(1%)	123	(2%)	208	(2%)	N/A	N/A N/A
Unspecified	10	3	(0%)	0	(0%)	3	(0%)	N/A	N/A N/A
AREA OF RESIDENCE AT DIAGNOSIS*									
Detroit Metro	11,880	4,049	(64%)	4,803	(66%)	8,852	(65%)	199	4,439,490 (44%)
Out-State	5,350	1,885	(30%)	2,103	(29%)	3,988	(29%)	74	5,369,451 (53%)
Prison	770	417	(7%)	352	(5%)	769	(6%)	N/A	N/A N/A
Unknown	10	1	(0%)	1	(0%)	2	(0%)	N/A	N/A N/A
TOTAL	18,000	6,352 (100%)		7,259 (100%)		13,611 (100%)		135	10,095,643 (100%)

*See pages i and ii for descriptions of prevalence estimate calculations and risk category groupings. Risk categories used in Michigan are newly defined as of the July 2007 quarter.

[†]To calculate "1 out x" statements for rate, divide the census number by the estimated prevalence. For example, for non-Hispanic whites: 7,846,335 / 6,370 = 1,232. Thus, an estimated 1 out of every 1,232 non-Hispanic white persons in Michigan are living with HIV.

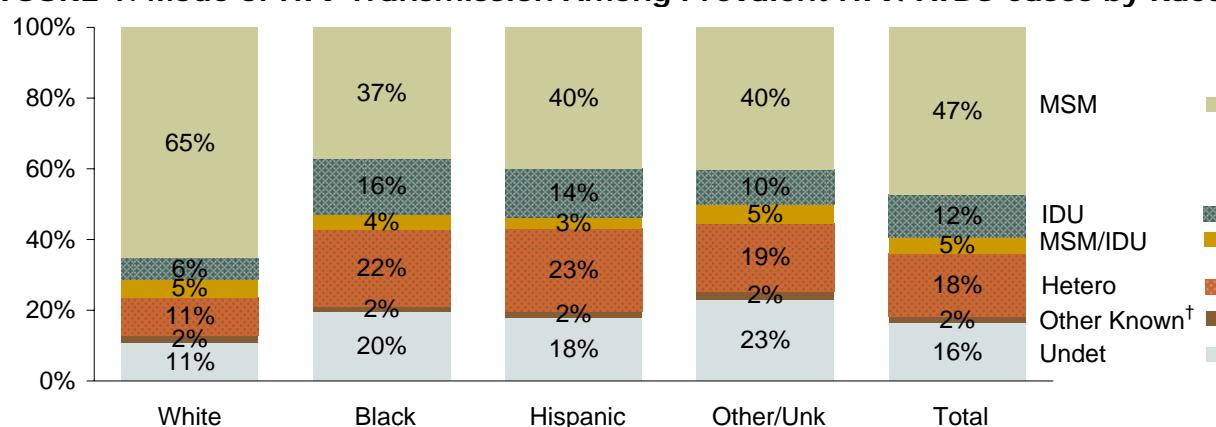
[§]In this report, persons described as white, black, Asian/Pacific Islander (PI), or American Indian/Alaska Native (AN) are all non-Hispanic; persons described as Hispanic might be of any race.

*Detroit Metro Area consists of Oakland, Monroe, Lapeer, Macomb, St. Clair, and Wayne Counties. The remaining counties comprise the Out-State area.

TABLE 2. Sex, Race, and Risk Among Prevalent HIV/AIDS Cases

MALES	White	Black	Hispanic	Other or Unknown	Male Subtotal
Male-Male sex	3,142 (75%)	2,969 (52%)	218 (52%)	103 (54%)	6,432 (61%)
Injecting Drug Use	183 (4%)	756 (13%)	54 (13%)	13 (7%)	1,006 (10%)
Male-Male Sex/IDU	237 (6%)	349 (6%)	18 (4%)	14 (7%)	618 (6%)
Blood Products	66 (2%)	15 (0%)	1 (0%)	2 (1%)	84 (1%)
Heterosexual*	98 (2%)	366 (6%)	37 (9%)	4 (2%)	505 (5%)
Perinatal	15 (0%)	65 (1%)	2 (0%)	3 (2%)	85 (1%)
Undetermined	447 (11%)	1,159 (20%)	92 (22%)	50 (26%)	1,748 (17%)
PH-Male	279 (7%)	820 (14%)	70 (17%)	31 (16%)	1,200 (11%)
Unknown	168 (4%)	339 (6%)	22 (5%)	19 (10%)	548 (5%)
Male Subtotal	4,188 (40%)	5,679 (54%)	422 (4%)	189 (2%)	10,478 (100%)
FEMALES	White	Black	Hispanic	Other or Unknown	Female Subtotal
Injecting Drug Use	114 (18%)	500 (22%)	21 (17%)	12 (18%)	647 (21%)
Blood Products	9 (1%)	4 (0%)	0 (0%)	0 (0%)	13 (0%)
Heterosexual	418 (67%)	1,364 (59%)	91 (73%)	45 (67%)	1,918 (61%)
HRH	317 (51%)	851 (37%)	66 (53%)	23 (34%)	1,257 (40%)
PH-Female	101 (16%)	513 (22%)	25 (20%)	22 (33%)	661 (21%)
Perinatal	13 (2%)	47 (2%)	6 (5%)	1 (1%)	67 (2%)
Undetermined*	72 (12%)	401 (17%)	6 (5%)	9 (13%)	488 (16%)
Female Subtotal	626 (20%)	2,316 (74%)	124 (4%)	67 (2%)	3,133 (100%)
TOTAL	White	Black	Hispanic	Other or Unknown	Risk Total
Male-Male sex	3,142 (65%)	2,969 (37%)	218 (40%)	103 (40%)	6,432 (47%)
Injecting Drug Use	297 (6%)	1,256 (16%)	75 (14%)	25 (10%)	1,653 (12%)
Male-Male Sex/IDU	237 (5%)	349 (4%)	18 (3%)	14 (5%)	618 (5%)
Blood Products	75 (2%)	19 (0%)	1 (0%)	2 (1%)	97 (1%)
Heterosexual	516 (11%)	1,730 (22%)	128 (23%)	49 (19%)	2,423 (18%)
HRH	415 (9%)	1,217 (15%)	103 (19%)	27 (11%)	1,762 (13%)
PH-Female	101 (2%)	513 (6%)	25 (5%)	22 (9%)	661 (5%)
Perinatal	28 (1%)	112 (1%)	8 (1%)	4 (2%)	152 (1%)
Undetermined	519 (11%)	1,560 (20%)	98 (18%)	59 (23%)	2,236 (16%)
PH-Male	279 (6%)	820 (10%)	70 (13%)	31 (12%)	1,200 (9%)
Unknown	240 (5%)	740 (9%)	28 (5%)	28 (11%)	1,036 (8%)
RACE TOTAL	4,814 (35%)	7,995 (59%)	546 (4%)	256 (2%)	13,611 (100%)

*In the male subset all cases in the heterosexual category are HRH because the PH-Female category is not applicable to males and, likewise, in the female subset, all cases in the undetermined category are of unknown risk because the PH-Male category is not applicable to females.

FIGURE 1. Mode of HIV Transmission Among Prevalent HIV/AIDS Cases by Race

†The 'Other Known' category in Figure 1 is a combination of 'Blood Products' and 'Perinatal' from Table 2

TABLE 3. Sex, Race, and Age at HIV Diagnosis Among Prevalent HIV/AIDS Cases

MALES	White	Black	Hispanic	Other or Unknown	Male Subtotal
0 - 12 years	25 (1%)	70 (1%)	2 (0%)	4 (2%)	101 (1%)
13 - 19 years	57 (1%)	298 (5%)	14 (3%)	5 (3%)	374 (4%)
20 - 24 years	381 (9%)	776 (14%)	46 (11%)	24 (13%)	1,227 (12%)
25 - 29 years	700 (17%)	912 (16%)	82 (19%)	32 (17%)	1,726 (16%)
30 - 39 years	1,680 (40%)	1,937 (34%)	171 (41%)	83 (44%)	3,871 (37%)
40 - 49 years	972 (23%)	1,200 (21%)	74 (18%)	32 (17%)	2,278 (22%)
50 - 59 years	292 (7%)	409 (7%)	25 (6%)	7 (4%)	733 (7%)
60 years and over	81 (2%)	75 (1%)	8 (2%)	2 (1%)	166 (2%)
Total*	4,188 (40%)	5,677 (54%)	422 (4%)	189 (2%)	10,476 (100%)
FEMALES	White	Black	Hispanic	Other or Unknown	Female Subtotal
0 - 12 years	14 (2%)	51 (2%)	6 (5%)	1 (1%)	72 (2%)
13 - 19 years	39 (6%)	107 (5%)	11 (9%)	2 (3%)	159 (5%)
20 - 24 years	114 (18%)	285 (12%)	18 (15%)	6 (9%)	423 (14%)
25 - 29 years	128 (20%)	368 (16%)	16 (13%)	12 (18%)	524 (17%)
30 - 39 years	191 (31%)	792 (34%)	44 (35%)	28 (42%)	1,055 (34%)
40 - 49 years	93 (15%)	511 (22%)	19 (15%)	10 (15%)	633 (20%)
50 - 59 years	38 (6%)	173 (7%)	7 (6%)	6 (9%)	224 (7%)
60 years and over	8 (1%)	29 (1%)	3 (2%)	2 (3%)	42 (1%)
Total*	625 (20%)	2,316 (74%)	124 (4%)	67 (2%)	3,132 (100%)
TOTAL	White	Black	Hispanic	Other or Unknown	Age Total
0 - 12 years	39 (1%)	121 (2%)	8 (1%)	5 (2%)	173 (1%)
13 - 19 years	96 (2%)	405 (5%)	25 (5%)	7 (3%)	533 (4%)
20 - 24 years	495 (10%)	1,061 (13%)	64 (12%)	30 (12%)	1,650 (12%)
25 - 29 years	828 (17%)	1,280 (16%)	98 (18%)	44 (17%)	2,250 (17%)
30 - 39 years	1,871 (39%)	2,729 (34%)	215 (39%)	111 (43%)	4,926 (36%)
40 - 49 years	1,065 (22%)	1,711 (21%)	93 (17%)	42 (16%)	2,911 (21%)
50 - 59 years	330 (7%)	582 (7%)	32 (6%)	13 (5%)	957 (7%)
60 years and over	89 (2%)	104 (1%)	11 (2%)	4 (2%)	208 (2%)
RACE TOTAL *	4,813 (35%)	7,993 (59%)	546 (4%)	256 (2%)	13,608 (100%)

*Not included in this table are one white female and two black male cases of unknown age at diagnosis

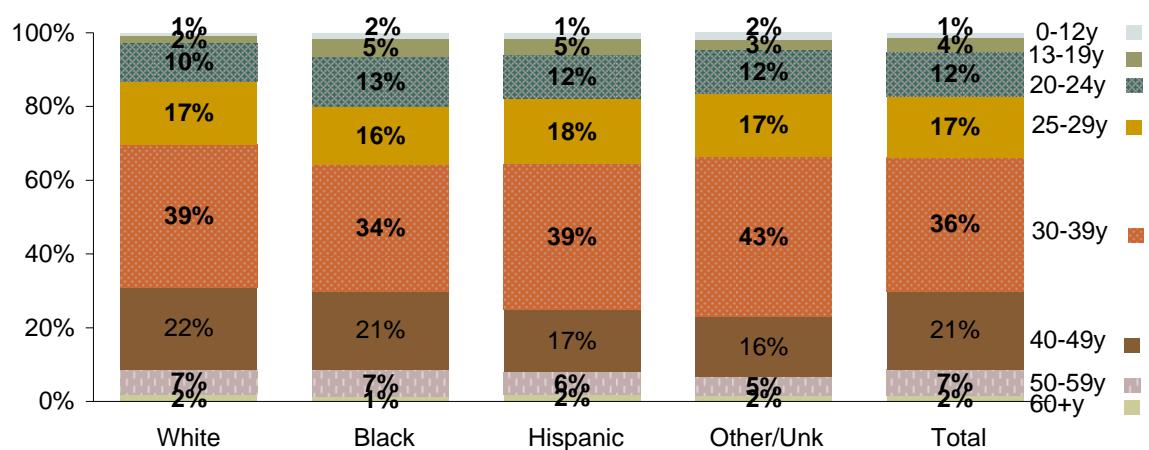
FIGURE 2. Age at HIV Diagnosis Among Prevalent HIV/AIDS Cases by Race

TABLE 4. New Diagnoses, Deaths, and Prevalence of HIV/AIDS by Year

Year	HIV/AIDS			AIDS		
	New HIV Diagnoses	Deaths	Prevalence	New AIDS Diagnoses	Deaths	Prevalence
1981	4	2	2	3	2	1
1982	3	0	5	2	0	3
1983	28	5	28	22	5	20
1984	71	17	82	50	17	53
1985	382	63	401	99	63	89
1986	488	102	787	168	99	158
1987	719	182	1,324	318	174	302
1988	906	263	1,967	493	254	541
1989	1,303	380	2,890	689	370	860
1990	1,439	453	3,876	795	433	1,222
1991	1,449	536	4,789	963	515	1,670
1992	1,494	662	5,621	1,231	630	2,271
1993	1,306	822	6,105	1,126	776	2,621
1994	1,217	901	6,421	1,013	843	2,791
1995	1,196	911	6,706	1,062	843	3,010
1996	1,126	632	7,200	857	583	3,284
1997	1,050	469	7,781	736	419	3,601
1998	909	399	8,291	647	351	3,897
1999	754	363	8,682	575	317	4,155
2000	924	379	9,227	649	328	4,476
2001	890	381	9,736	572	314	4,734
2002	771	296	10,211	575	268	5,041
2003	877	264	10,824	598	229	5,410
2004	891	252	11,463	553	211	5,752
2005	896	264	12,095	676	232	6,196
2006	833	209	12,719	628	184	6,640
2007	825	214	13,330	595	187	7,048
2008	315	34	13,611	242	31	7,259
TOTAL	23,062	9,453		15,934	8,676	

The prevalence of HIV in Michigan has steadily increased, since persons with HIV are living longer. This is largely due to improved anti-retroviral therapy.

The increase in HIV prevalence is also reflected in Figure 3 on page 5, which shows that the number of persons diagnosed, while stable for the last several years, is greater than the number of deaths each year. This directly contributes to the increase in prevalence. The current reported prevalence of HIV/AIDS in Michigan is 13,611. The prevalence of AIDS, which is a subset of HIV/AIDS prevalence, is 7,259.

As implied, the HIV/AIDS section displays data on all persons with HIV, including those with AIDS, as well as those who have not been diagnosed with AIDS. Thus, persons represented in the AIDS section are also represented in the HIV/AIDS section. The number of reported deaths includes deaths directly attributable to presence of HIV/AIDS as well as deaths due to other causes.

NOTE: Reporting for recent years may not be complete. Data are not adjusted to account for reporting delays.

FIGURE 3. New Diagnoses, Deaths, and Prevalence of HIV/AIDS by Year

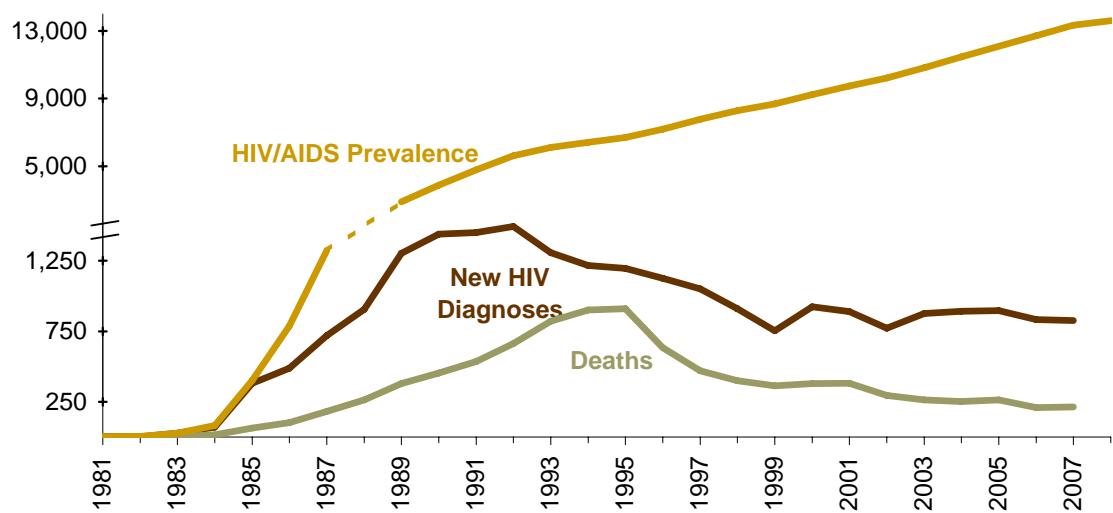


Figure 4 (below) shows the number of HIV-infected Michigan residents who have been reported as deceased by a local health department, the department of vital records via a data match or death certificate, or an alternate source. The number of deaths increased in all race/sex groups from the beginning of the epidemic through approximately 1994-1995. The number of deaths decreased markedly between 1995 and 1998 and then were relatively stable until 2001. It should be noted that the percent decrease in deaths among white males (74%) between 1995 and 2001 was more pronounced than the percent decrease among black males (57%), and the percent decrease among white females (55%) was larger than the percent decrease among black females (38%). Encouragingly, the number of deaths in black males has fallen substantially from 2001 to 2005 (40%), even in comparison to white males (24%), black females (25%), and white females (11%), but the number of deaths among black males still exceeds that of any other race/sex group.

FIGURE 4. HIV/AIDS Deaths by Race/Sex

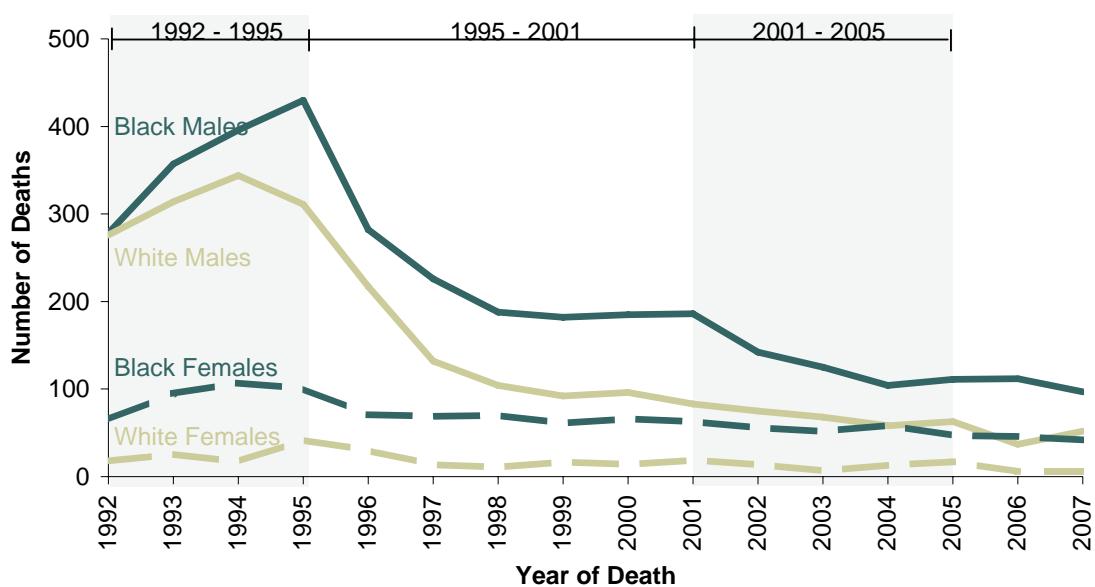


TABLE 5. Demographic Information on Persons Ever Diagnosed* with HIV

RACE/ETHNICITY	2008 ^t						CUMULATIVE (through 2008)					
	Male		Female		Total		Male		Female		Total	
White	84	(34%)	12	(18%)	96	(30%)	7,447	(41%)	936	(20%)	8,383	(36%)
Black	143	(57%)	47	(71%)	190	(60%)	9,901	(54%)	3,573	(75%)	13,474	(58%)
Hispanic	14	(6%)	6	(9%)	20	(6%)	653	(4%)	170	(4%)	823	(4%)
Asian	2	(1%)	0	(0%)	2	(1%)	64	(0%)	17	(0%)	81	(0%)
Am Indian	0	(0%)	1	(2%)	1	(0%)	47	(0%)	16	(0%)	63	(0%)
Multi/Unk	6	(2%)	0	(0%)	6	(2%)	183	(1%)	59	(1%)	242	(1%)
RISK^s												
Male-Male Sex	139	(56%)	--	--	139	(44%)	10,734	(59%)	--	--	10,734	(47%)
Injection Drug Use	9	(4%)	9	(14%)	18	(6%)	2,655	(15%)	1,519	(32%)	4,174	(18%)
MSM/IDU	8	(3%)	--	--	8	(3%)	1,290	(7%)	--	--	1,290	(6%)
Blood Products	0	(0%)	0	(0%)	0	(0%)	306	(2%)	37	(1%)	343	(1%)
Heterosexual	3	(1%)	36	(55%)	39	(12%)	741	(4%)	2,498	(52%)	3,239	(14%)
HRH	3	(1%)	8	(12%)	11	(3%)	741	(4%)	1,729	(36%)	2,470	(11%)
PH-Female	--	--	28	(42%)	28	(9%)	--	--	769	(16%)	769	(3%)
Perinatal	1	(0%)	0	(0%)	1	(0%)	126	(1%)	99	(2%)	225	(1%)
Undetermined	89	(36%)	21	(32%)	110	(35%)	2,443	(13%)	618	(13%)	3,061	(13%)
PH-Male	44	(18%)	--	--	44	(14%)	1,609	(9%)	--	--	1,609	(7%)
Unknown	45	(18%)	21	(32%)	66	(21%)	834	(5%)	618	(13%)	1,452	(6%)
AGE AT HIV DIAGNOSIS												
0 - 12 years	1	(0%)	0	(0%)	1	(0%)	169	(1%)	103	(2%)	272	(1%)
13 - 19 years	25	(10%)	2	(3%)	27	(9%)	455	(2%)	188	(4%)	643	(3%)
20 - 24 years	45	(18%)	8	(12%)	53	(17%)	1,639	(9%)	522	(11%)	2,161	(9%)
25 - 29 years	41	(16%)	12	(18%)	53	(17%)	2,936	(16%)	733	(15%)	3,669	(16%)
30 - 39 years	44	(18%)	20	(30%)	64	(20%)	7,010	(38%)	1,692	(35%)	8,702	(38%)
40 - 49 years	55	(22%)	14	(21%)	69	(22%)	4,277	(23%)	1,074	(23%)	5,351	(23%)
50 - 59 years	28	(11%)	9	(14%)	37	(12%)	1,402	(8%)	356	(7%)	1,758	(8%)
60 years and over	10	(4%)	1	(2%)	11	(3%)	405	(2%)	102	(2%)	507	(2%)
Unspecified	0	(0%)	0	(0%)	0	(0%)	2	(0%)	1	(0%)	3	(0%)
DISEASE STATUS^y												
AIDS - Same time	55	(22%)	13	(20%)	68	(22%)	7,203	(39%)	1,403	(29%)	8,606	(37%)
AIDS - Short lag	17	(7%)	6	(9%)	23	(7%)	1,330	(7%)	368	(8%)	1,698	(7%)
AIDS - Long lag	0	(0%)	0	(0%)	0	(0%)	4,446	(24%)	1,187	(25%)	5,633	(24%)
HIV, not AIDS	177	(71%)	47	(71%)	224	(71%)	5,316	(29%)	1,813	(38%)	7,129	(31%)
AREA OF RESIDENCE AT DIAGNOSIS^z												
Detroit Metro	160	(64%)	54	(82%)	214	(68%)	12,034	(66%)	3,473	(73%)	15,507	(67%)
Out-State	83	(33%)	12	(18%)	95	(30%)	5,191	(28%)	1,198	(25%)	6,389	(28%)
Prison/Unknown	6	(2%)	0	(0%)	6	(2%)	1,070	(6%)	100	(2%)	1,170	(5%)
TOTAL	249	(79%)	66	(21%)	315	(100%)	18,295	(79%)	4,771	(21%)	23,066	(100%)

*Includes deceased cases

^tData for cases diagnosed in 2008 may be incomplete at this time^sSee page i for description of risk category groupings. Risk categories used in Michigan are newly defined as of the July 2007 quarter.^yThe definitions of disease status are as follows:

AIDS - Same time = Concurrent HIV and AIDS diagnoses (diagnoses within the same month)

AIDS - Short lag = AIDS diagnosed 1 month to 12 months after HIV diagnosis

AIDS - Long lag = AIDS diagnosed more than 12 months after HIV diagnosis

HIV, not AIDS = Has not been diagnosed with AIDS

^zDetroit Metro Area consists of Oakland, Monroe, Lapeer, Macomb, St. Clair, and Wayne Counties. The remaining counties comprise the Out-State area.

NOTE: <5 and ** = 1, 2, 3, or 4 cases

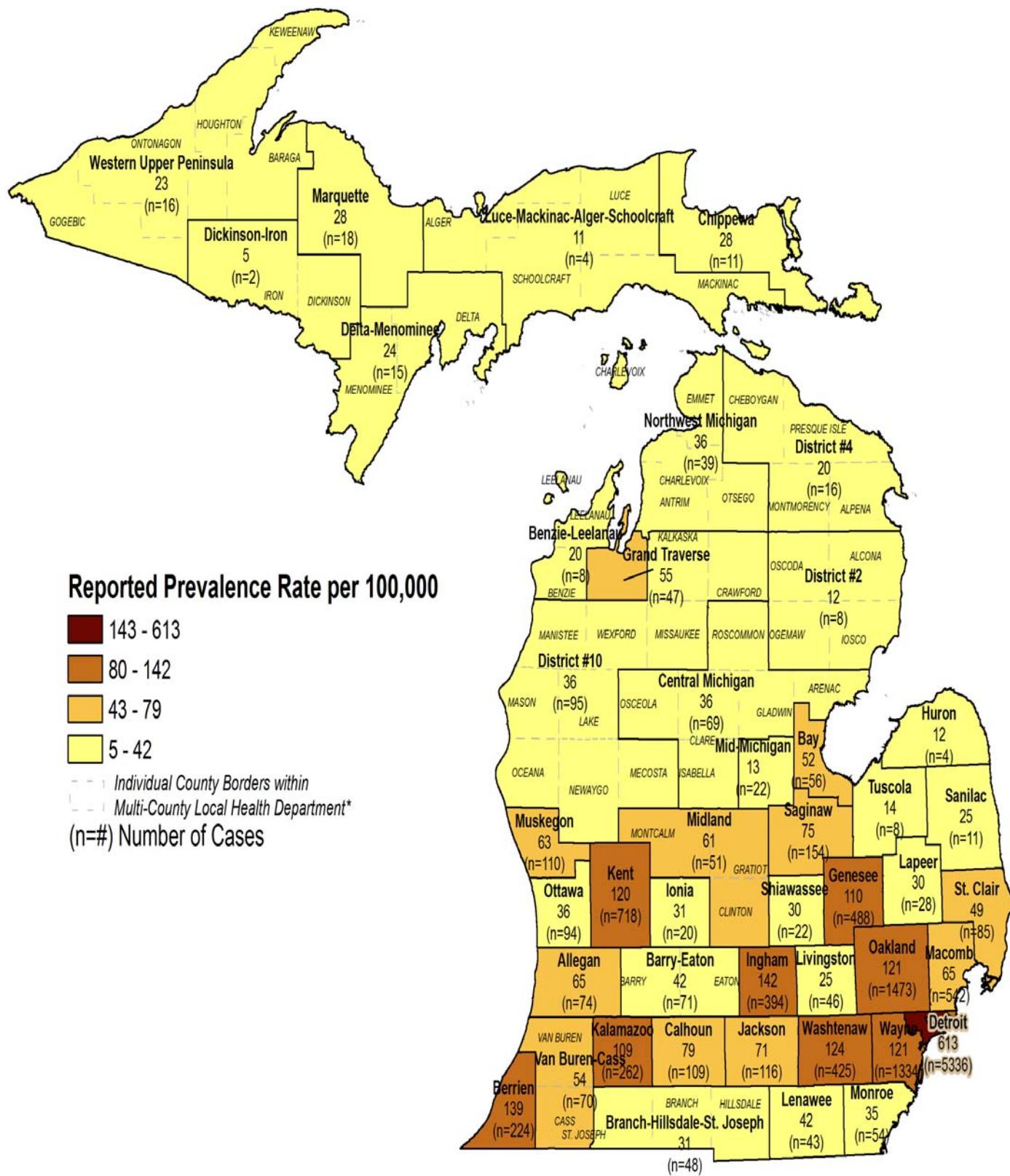
TABLE 6. Prevalent HIV/AIDS Cases According to County of Residence at Diagnosis

COUNTY	EST PREV	REPORTED PREVALENCE				CENSUS 2006 EST	COUNTY	EST PREV	REPORTED PREVALENCE				CENSUS 2006 EST
		Number	HIV, Not AIDS	AIDS	Total	Rate*			Number	HIV, Not AIDS	AIDS	Total	Rate*
Alcona	10	0	1	1	9	11,759	Livingston	60	22	24	46	25	184,511
Alger	10	0	1	1	10	9,665	Luce	10	0	0	0	0	6,684
Allegan	100	31	43	74	65	113,501	Mackinac	10	1	1	2	18	11,050
Alpena	10	1	2	3	10	30,067	Macomb	730	252	290	542	65	832,861
Antrim	10	4	5	9	37	24,463	Manistee	20	5	7	12	48	25,067
Arenac	10	1	1	2	12	17,024	Marquette	20	11	7	18	28	64,675
Baraga	10	2	4	6	69	8,742	Mason	10	3	6	9	31	29,045
Barry	30	8	14	22	37	59,899	Mecosta	20	9	5	14	33	42,252
Bay	80	32	24	56	52	108,390	Menominee	10	2	1	3	12	24,696
Benzie	10	1	1	2	11	17,652	Midland	30	8	14	22	26	83,792
Berrien	300	95	129	224	139	161,705	Missaukee	10	3	2	5	33	15,197
Branch	10	9	2	11	24	45,875	Monroe	70	21	33	54	35	155,035
Calhoun	150	53	56	109	79	137,991	Montcalm	20	6	11	17	27	63,977
Cass	40	14	14	28	55	51,329	Montmorency	10	0	3	3	29	10,478
Charlevoix	20	5	8	13	49	26,422	Muskegon	150	54	56	110	63	175,231
Cheboygan	10	2	5	7	26	27,282	Newaygo	20	7	10	17	34	49,840
Chippewa	10	7	4	11	28	38,674	Oakland	1,980	701	772	1,473	121	1,214,255
Clare	20	6	8	14	45	31,307	Oceana	10	6	4	10	35	28,639
Clinton	40	16	12	28	40	69,909	Ogemaw	10	1	2	3	14	21,665
Crawford	10	0	3	3	20	14,928	Ontonagon	10	1	1	2	28	7,202
Delta	20	4	8	12	31	38,156	Osceola	10	2	2	4	17	23,584
Dickinson	10	0	1	1	4	27,447	Oscoda	10	1	0	1	11	9,140
Eaton	70	24	25	49	46	107,237	Otsego	10	4	5	9	36	24,711
Emmet	10	3	5	8	24	33,607	Ottawa	130	39	55	94	36	257,671
Genesee	650	240	248	488	110	441,966	Presque Isle	10	1	2	3	21	14,144
Gladwin	10	2	6	8	30	27,008	Roscommon	20	4	10	14	54	26,064
Gogebic	10	1	1	2	12	16,524	Saginaw	210	76	78	154	75	206,300
Grand Traverse	60	23	24	47	55	84,952	Sanilac	10	4	7	11	25	44,448
Gratiot	10	3	3	6	14	42,107	Schoolcraft	10	1	0	1	11	8,744
Hillsdale	10	4	3	7	15	47,206	Shiawassee	30	8	14	22	30	72,912
Houghton	10	2	4	6	17	35,334	St. Clair	110	45	40	85	49	171,725
Huron	10	2	2	4	12	34,143	St. Joseph	40	11	19	30	48	62,777
Ingham	530	214	180	394	142	276,898	Tuscola	10	4	4	8	14	57,878
Ionia	30	9	11	20	31	64,821	Van Buren	60	18	24	42	53	79,018
Iosco	10	2	1	3	11	26,831	Washtenaw	570	201	224	425	124	344,047
Iron	10	0	1	1	8	12,377	Wayne Total	8,950	3,018	3,652	6,670	338	1,971,853
Isabella	40	14	13	27	41	65,818	Wayne, excl. Detroit	1,790	585	749	1,334	121	1,100,732
Jackson	160	55	61	116	71	163,851	Detroit	7,160	2,433	2,903	5,336	613	871,121
Kalamazoo	350	135	127	262	109	240,720	Wexford	20	4	8	12	38	31,994
Kalkaska	10	3	1	4	23	17,330	Detroit Metro [†]	11,880	4,049	4,803	8,852	199	4,439,490
Kent	960	319	399	718	120	599,524	Out-State [†]	5,350	1,885	2,103	3,988	71	5,656,153
Keweenaw	10	0	0	0	0	2,183	Prisons [‡]	770	417	352	769	N/A	N/A
Lake	10	3	6	9	76	11,793	Unknown	10	1	1	2	N/A	N/A
Lapeer	40	12	16	28	30	93,761	TOTAL	18,000	6,352	7,259	13,611	135	10,095,643

*Rate is reported prevalence per 100,000 and is not an estimate

[†]Detroit Metro Area consists of Oakland, Monroe, Lapeer, Macomb, St. Clair, and Wayne Counties. The remaining counties comprise the Out-State area.[‡]The Prevalence Estimate for prisons is calculated differently from the remainder of the state. Please see the Front Matter (p. ii) for a further explanation.

FIGURE 5. Reported HIV Prevalence and Prevalence Rates by Residence at Diagnosis



*To mitigate the effect of small numbers of cases, reported HIV prevalence rates and case numbers for multi-county health departments are listed for the health department as a whole and not the individual counties.

TABLE 7. Perinatal HIV Exposures by Year of Birth, 2002 - 2008

NUMBER DELIVERIES/BIRTHS	2002	2003	2004	2005	2006	2007	2008[†]
Infants	57	66	56	71	48	23	3
Mothers	57	65	51	65	46	20	3
RESIDENCE AT BIRTH							
Southeast Michigan	36 (63%)	45 (68%)	38 (68%)	42 (59%)	29 (60%)	9 (39%)	0 (0%)
Out-State Michigan	21 (37%)	21 (32%)	18 (32%)	29 (41%)	19 (40%)	14 (61%)	3 (100%)
INFANTS' RACE							
White, Non-Hispanic	11 (19%)	10 (15%)	7 (13%)	9 (13%)	6 (13%)	5 (22%)	2 (67%)
Black, Non-Hispanic	38 (67%)	51 (77%)	46 (82%)	57 (80%)	33 (69%)	17 (74%)	1 (33%)
Other	8 (14%)	5 (8%)	3 (5%)	5 (7%)	9 (19%)	1 (4%)	0 (0%)
MOTHERS' MODE OF TRANSMISSION*							
Injecting Drug Use	5 (9%)	6 (9%)	3 (6%)	7 (11%)	2 (4%)	1 (5%)	0 (0%)
High Risk Heterosexual	33 (58%)	30 (46%)	13 (25%)	31 (48%)	18 (39%)	3 (15%)	1 (33%)
Undetermined	19 (33%)	28 (43%)	35 (69%)	27 (42%)	26 (57%)	16 (80%)	2 (67%)

*Not reported in this table is one mother's mode of transmission of 'Blood Products' for an infant born in 2003

† Reporting for 2008 is incomplete at this time.

Table 7 displays the characteristics of all infants born to HIV positive women as well as characteristics of their mothers. Figure 6 indicates the current infection status of these infants -- the bottom portion of the bars showing number confirmed to be infected with HIV and/or diagnosed with AIDS; the middle portion showing those not to be infected with HIV or AIDS through laboratory testing or physician exam; and the top portion showing the number whose HIV infection status is unknown due to loss to follow up or infection status reporting delay.

Since 1994, the CDC and other organizations involved in perinatal HIV transmission have recommended that HIV-positive pregnant women receive doses of zidovudine (ZDV or AZT) prenatally and at labor and delivery and that children born to these women receive ZDV neonatally. Despite these recommendations, only 57% of births to HIV-positive women are documented by MDCH to have received all three arms of therapy. For more information, please see the annual Missed Opportunity report, which can be found at: http://www.michigan.gov/mdch/0,1607,7-132-2940_2955_2982_46000_46003-166892--,00.html

FIGURE 6. Infection Status of Perinatal HIV Exposures, 2002 - 2008